

WE CLAIM:

1. A monoclonal antibody which immunospecifically binds to an epitope of SSeCKS .
2. The monoclonal antibody of claim 1 which binds to human SSeCKS.
3. The monoclonal antibody of claim 1 produced by the hybridoma cell line designated 94A3.
4. The monoclonal antibody of claim 1 produced by the hybridoma cell line designated 78H11.
5. The monoclonal antibody of claim 1 produced by the hybridoma cell line designated 82B3.
6. The monoclonal antibody of claim 1 produced by the hybridoma cell line designated 31A3.
7. A method for identifying a compound capable of modulating cell proliferation comprising:
 - (i) contacting a cell that comprises a reporter gene under the transcriptional control of a SSeCKS gene responsive element with a test compound and measuring the level of reporter gene expression in the cell;
 - (ii) measuring the level of reporter gene expression in the absence of the test compound; and
 - (iii) comparing the levels of reporter gene expression measured in (i)

and (ii);

wherein a difference in the levels of reporter gene expression measured in steps (i) and (ii) has a positive correlation with cell proliferation modulating activity of the test compound.

8. The method of claim 7 wherein an increase in reporter gene activity correlates with the ability of the test compound to inhibit cell proliferation.

9. A method for identifying a compound capable of modulating cell proliferation comprising:

- (i) contacting a cell that comprises a reporter gene under the transcriptional control of a cyclin D gene responsive element with a test compound and measuring the level of reporter gene expression in the cell;
- (ii) measuring the level of reporter gene expression in the absence of the test compound; and
- (iii) comparing the levels of reporter gene expression measured in (i) and (ii);

wherein a difference in the levels of reporter gene expression measured in steps (i) and (ii) has a positive correlation with cell proliferation modulating activity of the test compound.

10. The method of claim 7, wherein the cell is a transformed cell.

11. The method of claim 10 wherein the cell is a *ras* or *src* transformed cell.

12. A method for identifying a compound capable of modulating hair growth comprising:

- (i) contacting a cell that expresses cyclin D and SSeCKS, a
in the presence of a stimulator of cell proliferation;
- (ii) determining the level of nuclear translocation of the cyclin D
into the nucleus of the cell;
- (iii) determining the level of nuclear translocation in the absence of the
test compound; and
- (iv) comparing the level of nuclear translocation measured in (ii) and
(iii);

wherein a difference in the level of nuclear translocation measured in steps (ii) and (iii) has a positive correlation with cell proliferation modulating activity of the test compound.

13. A method of inhibiting cell proliferation in a cell comprising introducing a nucleic acid molecule encoding a SSeCKS polypeptide that is capable of binding cyclin D and preventing translocation of cyclin D into the nucleus.

14. The method of claim 13 wherein the nucleic acid molecule further encodes a cytoskeletal anchoring peptide.

15. A method of inhibiting cell proliferation in a cell comprising introducing a nucleic acid molecule encoding a SSeCKS polypeptide that has an increased affinity for cyclin D.

16. A method for determining the metastatic potential of a cancer cell comprising:

- (a) detecting the expression of SSeCKS in the cell; and
- (b) comparing the level of SSeCKS expression in the cancer cell to the level of expression in a control sample;

wherein a decrease in the level of SSeCKS expression detected in the cancer cell as compared to the normal cell is an indicator of increased metastatic potential.

17. The method of claim 16 wherein the SSeCKS protein is detected using an immunoassay.

18. A method for determining the metastatic potential of a cancer cell comprising detecting the presence of a SSeCKS encoding nucleic acid in the cell; wherein a decrease or absence of SSeCKS encoding nucleic acid within the cell is an indicator of increased metastatic potential.

19. A method for modulating cell proliferation in a mammal comprising administering to the mammal a compound that prevents nuclear translocation of cyclin D.

20. A method for modulating hair growth in a mammal comprising administering to the mammal a compound that increases the expression of SSeCKS.